

CLAIMS

1. A peptide derived from the amino acid sequence of human WT1 set forth in SEQ ID NO: 1 and having activity as an HLA-A26-binding cancer antigen peptide.

2. The peptide according to claim 1, which comprises an amino acid sequence set forth in SEQ ID NO: 2 (Asp Gln Leu Lys Arg His Gln Arg Arg), SEQ ID NO: 8 (Val Thr Phe Asp Gly Thr Pro Ser Tyr), or SEQ ID NO: 9 (Gln Gly Ser Leu Gly Glu Gln Gln Tyr).

3. The peptide according to claim 1 or 2, which is an epitope peptide.

4. A polynucleotide encoding a peptide described in any one of claims 1 to 3.

5. An expression vector containing the polynucleotide described in claim 4.

6. A cell containing the expression vector described in claim 5.

7. A process for producing a peptide described in any one of claims 1 to 3, which comprises culturing the cell described in claim 6 under the condition where the peptide can be expressed.

8. An antibody which specifically binds to the peptide described in claim 1 or 2.

9. An antigen-presenting cell on which a complex between an HLA-A26-binding cancer antigen peptide derived from the amino acid sequence of human WT1 set forth in SEQ ID NO: 1, preferably a peptide described in claim 2 and an HLA-A26 antigen is presented.

10. A CTL which recognizes a complex between an HLA-A26-binding cancer antigen peptide derived from the amino acid sequence of human WT1 set forth in SEQ ID NO: 1, preferably a peptide described in claim 2 and an HLA-A26 antigen.

11. A pharmaceutical composition which comprises a peptide described in any one of claims 1 to 3, an expression vector described in claim 5, a cell described in claim 6, an antigen-presenting cell described in claim 9, or a CTL described in claim 10, together with a pharmaceutically acceptable carrier.

12. The pharmaceutical composition according to claim 11, which is used as a CTL inducer.

13. The pharmaceutical composition according to claim 11, which is used as cancer vaccine.

14. An HLA monomer, dimer, tetramer or pentamer comprising an HLA-A26-binding cancer antigen peptide derived from the amino acid sequence of human WT1 set forth in SEQ ID NO: 1, preferably a peptide described in claim 2, together with an HLA-A26 antigen.

15. A reagent for the detection of CTLs specific for an HLA-A26-binding cancer antigen peptide derived from WT1, which reagent comprises an HLA monomer, dimer, tetramer or pentamer described in claim 14 as an ingredient.

16. A pharmaceutical composition which comprises any one of the following a) to f) together with a pharmaceutically acceptable carrier:

- a) a peptide comprising the amino acid sequence set forth in SEQ ID NO: 3 (Asp Leu Asn Ala Leu Leu Pro Ala Val),
- b) an epitope peptide comprising the peptide of a) above,
- c) an expression vector containing a polynucleotide encoding the peptide of a) or b) above,
- d) a cell containing the expression vector of c) above,
- e) an antigen-presenting cell on which a complex between the peptide of a) above and an HLA-A*0201 antigen is presented, and
- f) a CTL which recognizes the complex between the peptide of a) and an HLA-A*0201 antigen.

17. The pharmaceutical composition according to claim 16,

which is used as a CTL inducer.

18. The pharmaceutical composition according to claim 16, which is used as cancer vaccine.

5 19. An HLA monomer, dimer, tetramer or pentamer which comprises a peptide comprising the amino acid sequence set forth in SEQ ID NO: 3 (Asp Leu Asn Ala Leu Leu Pro Ala Val) together with an HLA-A*0201 antigen.

10 20. A reagent for the detection of CTLs specific for HLA-A*0201-binding cancer antigen peptide derived from WT1, which reagent comprises an HLA monomer, dimer, tetramer or pentamer described in claim 19 as an ingredient.